

WHAT IS CLAIMED IS:

1 1. A method for treating a body lumen of a patient, the method
2 comprising placing at least two magnetic or magnetizable devices within a wall of the body
3 lumen at a preselected location, wherein the magnetic devices are attracted to one another and
4 wherein the attraction between the magnetic devices at least partially constricts the lumen.

1 2. A method as in claim 1, wherein placing the magnetic devices further
2 comprises:
3 inserting an endoscope having a delivery device into the body lumen;
4 advancing the endoscope to position the delivery device near the preselected
5 location; and
6 implanting, with the delivery device the at least two magnetic or magnetizable
7 devices into the wall of the body lumen.

1 3. A method as in claim 2, wherein the at least two devices are not
2 magnetized when implanted into the wall of the patient's esophagus, the method further
3 comprising:
4 positioning a magnetizing device at a location near the implanted at least two
5 devices; and
6 magnetizing the at least one of the two devices.

1 4. A method as in claim 3, further comprising:
2 positioning a pressure sensing device at a location near the implanted at least
3 two magnets;
4 sensing a pressure within the body lumen at the location; and
5 adjusting the magnetic power of at least one of the two devices, based on the
6 sensed pressure.

1 5. A method as in claim 4, wherein sensing is performed using a pressure
2 sensor on the delivery device or endoscope.

1 6. A method as in claim 4 or 5, further comprising:
2 positioning a magnet adjustment device at a location near the implanted at
3 least two magnets; and

4 adjusting the magnetic power of the at least two magnets, based on the sensed
5 pressure within the esophagus.

1 7. A method as in claim 6, wherein adjusting is performed with an
2 electromagnet on the delivery device or the endoscope.

1 8. A method as in claim 1, wherein the at least two magnetic devices
2 comprise two magnets placed in opposing sides of the patient's esophagus.

1 9. A method as in claim 1, wherein the at least two magnetic devices
2 comprise at least four magnets contained within a retaining ring, wherein the retaining ring is
3 configured for placement within the wall of the esophagus and the at least four magnets
4 attract one another in a radial pattern to constrict the retaining ring.

1 10. A method as in claim 1, wherein the at least one of the two magnetic
2 devices comprises magnetic particles.

1 11. A device for treating a body lumen of a patient, the device comprising
2 a set of two or more magnets or magnetizable components for placement in the wall of the
3 lumen, wherein the devices are preferably ferrous particles coated with a biocompatible
4 coating such as pyrolytic carbon.

1 12. A device for treating a sphincter in a body lumen of a patient, the
2 device comprising:
3 an elongate catheter having a proximal end and a distal end; and
4 a magnetic delivery device disposed at the distal end of the elongate catheter
5 for placing at least two magnetic members within the wall of the lumen.

1 13. A device as in claim 12, wherein the magnetic delivery device
2 comprises:
3 an elongate tube disposed along the length of the catheter, the tube having a
4 proximal end and a distal end; and
5 at least one needle is located at the distal end of the tube for injecting magnetic
6 particles into the wall of the lumen.

1 14. A device for magnetizing magnetizable components or particles
2 disposed in the wall of a body lumen, said device comprising:

3 a catheter adapted to be introduced to the body lumen; and
4 a permanent or electromagnet disposed on the device for exposing the
5 magnetizable components or particles to a magnetic field.

1 15. A device as in claim 14, further comprising means for testing pressure
2 in the body lumen before, during, or after magnetization of the components or particles.

1 16. A device for tracking a body lumen comprising magnets or
2 magnetizable components disposed in a retaining ring adapted to position the components in
3 the wall of the body lumen so that the components will exert a closing force on the lumen
4 when the retaining ring is implanted about the lumen.